Chapter 1

Introduction

In this modern world, Technology has become replacement of some manually works necessary tools solving problem, as it is arises, everything has been easy for us. That is why in medical field "Doctor Appointment System "is very significant nowadays. That's why we will choose to develop a system for shire chhatrapati super specialist hospital it is multispecialty hospital includes specialist doctors in this hospital the appointment system is worked the manually the patient can call to receptionist to the hospital to enquire details and they will get the appointment manually after getting appointment patient have to wait too much time till the coming their number we have try to convert it in online mode in that system patient can see the information of Hospital and details of the doctor in the website patient able to see how many instruments they have from this online system we have put one step ahead to make digital world.

Doctors should make services accessible and available to their clients, as more and more people is having the need on medical attention. This system design in order for clients to select the appointment time according to her/his preference and for medical staffs to organized their schedules. Since, taking appointment manually will take or waste a lot of time that would also possibly risk someone's life. Thus," Doctor Appointment system" is going to be developed to reduce the problem concerning in practicing manual system. This serves as an easy way to immediate response to the clients who badly needs a medical doctor.

This is speciality of "Shri Chhatrapati Hospital"

Available Services:

- Neuro specialist
- Orthopedic
- Neuron Surgeon
- Plastic Surgeon
- General Surgeon

- Physiotherapy
- Pathology
- Radiology

1.1 What is Online Appointment System?

Online Appointment system is a system through which a user or Guest or simply, patients can access the website of the doctor and through the online software patients can easily make their appointments. In addition to that, patients can also provide additional information to the Doctor, making the doctor aware of their situation and giving the doctor time to prepare the necessary information for when the patients arrive. An online appointment system allows individual to conveniently and securely book their appointments online .compare to the usual queuing method, the web-based appointment system could significantly increase patients satisfaction with registration and reduced total waiting time effectively. It's introduced to solve the complication coming from managing all the paper work of every patient associated with the various departments of hospitalization with confidentiality.

1.2 Why patients want online appointment system?

In today's World when everything and anything can be found on the web, you have to make the most of it, also in case of online appointment booking for doctors. When we all are busy with our professional life, convenience is the most desired thing what we look for. To book a doctor in the shortest time is only possible through online appointment booking system. Specialists are our lifesavers and that is the reason they shouldn't be excessively a long way from the individuals who need healthcare services. With increasing number of individuals requiring medical treatment doctors should make their services more reachable to their patients.

1.3 Purpose of the project

This project aims to provide a user friendly, error free, reliable, and fast management system as well as a feature where clients can see the list of doctors available in that particular area.

Online Doctor Appointment System using PHP and Mysql is developed with point of manage the list of data of doctors, patients, appointment bookings, doctor available schedule information etc. This PHP Project on Doctor Appointment System, which is web based or online application which will resolves the problem of booking of Appointment according to the choice and requirement of the patient. Under this system, there is one feature like it is very effective solution which has offered with different available doctor availability on suitable dates and times, so patient can book doctor appointment according to their requirements or choice and patient can also cancel doctor appointment which also available under this system.

Chapter 2

Literature Survey

Globally Health care sector is the pivot and integral part of human's lives thus any error committed in the clinical services might leads to defect or termination of life. recently information and communication has been used extensively and services in the field of the healthcare services. Patient appointment with the Doctor is the one of the clinical services that has been automated. To summarize, an appointment system helps you manage appointments and seamlessly check-in patients to see consultants on arrival. Therefore, staff can focus on meeting and supporting patients to deliver a better all-round experience.

2.1 Need of the System

- Always available: Patient can make an appointment 24/7.
- Easy to use: Nothing to install, no servers or backup to worry about.
- Time saving technology.
- Avoid paper works.
- Maintain the contact details of the patient.
- Keep track of the appointment dates.
- Cost effective and easily manageable.

It provides the ability to manage all the paper work in one place, reducing the work of staff in arranging and analyzing the paperwork of the patient. So, these are all benefits in the system. So, our system is very needful for the users

2.2 Problem definition

Doctors are life savers; they shouldn't be too far from those who need health care. Doctors should make services accessible and available to their clients, as more and more people is having the need on medical attention. This system design in order for clients to select the appointment time according to her/his preference and for medical staffs to

organize their schedules. Since, taking appointment manually will take or waste a lot of time that would also possibly risk someone's life. Thus," Doctors Appointment system" is going to be develop to reduce the problem concerning in practicing manual system. This serves as an easy way to immediate response to the client who badly needs a medical doctor.

This system we can also called Online Patient Scheduling or also known as Online Appointment booking system and it has optimized phase of medical services to increase patient healthcare experience in hospitals or in clinics. This system has been build by motivating to see the increasing popularity of online appointment booking system and the main aims of developing this project on online appointment booking system, we have add doctor scheduling model also which has been takes into accounts when patient would like to seen this feature. Now a days it is rational to established the issue that a very less hospitals has provide online appointment booking system. So solve this all problem we have build this Doctor Online Appointment booking system.

Chapter 3

Scope of the project

This project aims to provide a user friendly, error free, reliable, and fast management system as well as a feature where clients can see the list of doctors available in that particular area. It also aims to lessen the manual work for managing the doctor.

- Always available: Patient can make an appointment 24/7.
- Easy to use: Nothing to install, no servers or backup to worry about.
- Time saving technology.
- Avoid paper works.
- Maintain the contact details of the patient.
- Keep track of the appointment dates.
- Cost effective and easily manageable.

It provides the ability to manage all the paper work in one place, reducing the work of staff in arranging and analyzing the paperwork of the patient. So, these are all benefits in the system. So, our system is very needful for the users

Online appointment scheduling system through which a user guest or simply, for the Doctor, and through the Online software, patient can easily make their appointments. In additional to that patient can also provide additional information to the Doctor aware of their situation and giving the Doctor time to prepare the necessary information for when the patient arrives

Chapter 4

Methodology

The proposed of the project is a smart appointment system that provided patients or, may user an easy way of booking a doctor's appointment online this is a website that overcomes the issue of managing and booking appointment according to user choice or demand.

Objective of Doctor Appointment system is to manage the details of doctor,

Booking Number.....The purposed of the project is to build an application program to reduce the manual work for managing the Doctor, patient, Appointment.

A Doctor Appointment booking system available on the internet, allows patient to book an appointment from the comfort of their home using their computer, laptop or mobile, and at any time, no matter where they are, they can contact doctors of their choice in any location.

The proposed work in this online hospital appointment system that uses online platform make the task of making an appointment from the doctor easy and reliable for the user the appointment system contain two modules one module is the system design for the patient that contain a login screen the patient has register himself before login in to system. After login in the patient can select the hospital and can give the hospital details the patient has the option of selecting a doctor of the list of doctor and can give the doctor details. The patient can request for an appointment on his /her preferred day or time The selected day or time slot will be reserve and the patient will successfully book their appointment. The second module is the Admin module that is design on the website. The admin views all details of doctor and all appointment by the admin The admin can add Doctor, view patient details and doctor details and can give appointment also all the doctor of the hospital are register by the admin doctors can not register them self. Aim of proposed

The system is to develop a system of improve facilities the proposed system can overcome all the limitation of existing system the system provide proper security and reduces the manual work .

- > Security of data
- ➤ Insure data accuracy
- ➤ Proper control of higher officials
- Minimize manual data entry
- Minimum time needed for the various processing.
- Greater efficiency
- > Better service
- > User friend line and iteractive
- > Minimum time required

In the existing system the exams are done only manually but in proposed system we have to computerize the exam using this system.

- Lack of security of data
- More men power
- Time consuming
- Consume large value pair work
- Needs manual calculation
- No direct role for the higher official

.

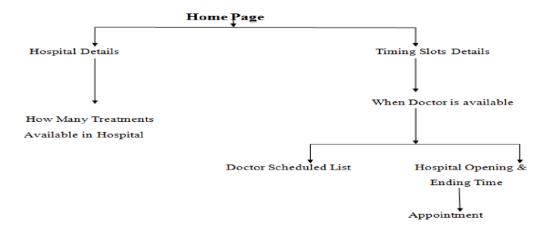
Functionalities provided by Doctor Appointment system are as follows:

- Provides the searching facilities based on various factors. Such as Doctor, patient, booking.
- Doctor appointment system also manage the online booking details.
- ❖ It tracks the all the information of appointment.
- ❖ Shows the information and description of the doctor, patient.
- ❖ To increase efficiency of managing the Doctor, Appointment.
- Editing, adding and updating of records is improved which result in proper resources management of Doctor Data.
- Manage the information of doctor.
- Manage the records of booking
- ❖ It deals with monitoring the information and transaction of booking.

4.1 How system's works?

- 1. When will be the whole user can visit on your website, they will see the hospital details1st of all.
- 2. User also able to check the facilities of hospital
- 3. User has to scheduled list on portal
- 4. User can able to see how many patients were booking their appointment.
- 5. After seeing process they can do that appointment process.
- 6. Then patient can fill all personal Information for Book appointment
- 7. The patient will be successfully booked them appointment

4.1.1 Modules



4.1.2 System Flow

Figure 4.1 Modules

These are the details of the home page modules. Firstly the user have to see the details of the hospital details. And the also check how many treatments available in hospital. Check the timing slot details and when doctor is available. Hospital opening and ending time.

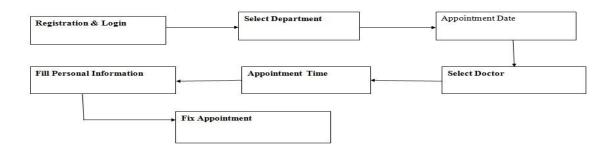


Figure 4.2 System work

These is a flow of our system user have to first registration and login after registration user is select department then appointment date and fill all the personal information appointment time select doctor and then appointment is fixed.

Chapter 5

Details of Designs, working and processes

Moving on, this hospital management system project in PHP focuses mainly on dealing with the patient, doctor, and hospital records. Also, the system displays all the available hospital departments and their respective doctors. In addition, the system allows creating a patient's personal account too. This project is divided into three categories. They are Admin Panel, Patient Panel, and Doctor Panel. In an overview of this web application, the user can simply make an appointment. Meaning, each user will have to fill up an appointment form from the client side. The form consists of fields such as patient name, address, number, and selection of department and doctor. During this procedure, the system creates personal accounts for each patient too.

Available Features:

Admin Panel

Doctor Panel

Patient Panel

Make Appointment

Approve/Reject Appointment

Update Profile

Patient's Account

After making an appointment for the very first time, the user can log in to the system and check their appointment status. By default, each appointment is set to pending status. Which later, the doctor should approve or reject it in order to start their treatment process. Also, the patient can remove their appointments anytime. From a patient's panel, he/she can update their profile, view treatment records, and prescription records. Under the treatment section, a patient can view all the records such as treatment type, doctor's name, date, and total charge. Similarly, the prescription section displays the date, name, and quantity of the medicines with the total bill charge.

Doctor's Panel

Each doctor will have their own personal account which lets them access the system. Here, the doctor can view all the pending appointments. Each appointment has options that allow the

doctor to approve or reject them. After approving the appointment, the doctor can view the patient's profile and appointment record. For the rest, the doctor has to maintain each by filling up their treatments. In order to set a treatment record, the user has to select a treatment type, description, date, and upload treatment files. After the completion of treatment records, the doctor can now proceed towards the prescription section. For the prescription, the doctor has to select available medicine, date, and enter quantity and dosage. After the submission of the prescription record, the system generates the total bill for the patient.

Admin Panel

On the other hand, the admin has full control over the system. He/she can view all the existing records of the hospital. An admin can manage patients, doctors, their departments, treatment types, and medical records. An admin has the right to register a doctor's account. For this, the admin has to set the doctor's account under various hospital departments too. The admin can view all the appointment records too. Also, the admin has to maintain billing records for each patient's treatment. In order to maintain the payment of each patient, the user has to enter the discount amount and the reason for it. After the payment, the patient can view all the reports from their own personal accounts.

5.1.1 Requirement analysis

Online appointment scheduling system through which a user guest or simply, for the Doctor, and through the Online software, patient can easily make their appointments. In additional to that patient can also provide additional information to the Doctor aware of their situation and giving the Doctor time to prepare the necessary information for when the patient arrives. The system has three users. Admin, Doctor, and Patients. So, all features have been divided between these three users. And online scheduling system allows individual to congenitally and securely book their appointment online. During data collection, the we investigated and found out how we the current system operates, not only that but also tried out which problem are faced and how they can be settled. The User describe some of the basic requirements or the system this includes search for patient, register [patient, Update record, Doctor information record, view doctor and view all type reports E-R Diagram. If any Patient did not come in hospital to book their appointment the receptionist manages the

scheduled time. If any patient comes to get without appointment, then they will replace to the patient who are not come in hospital with getting online appointment.

Database Designing

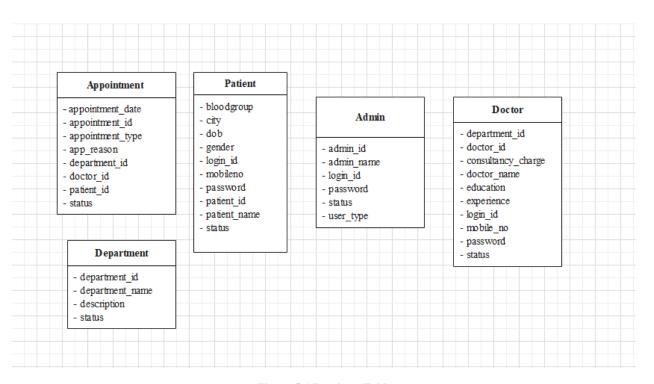


Figure 5.1 Database Table

User Requirement

- If any Patient did not come in hospital to book their appointment the receptionist manage the scheduled time.
- If any patient comes to get without appointment then they will replace to the patient who are not come in hospital with getting online appointment.
- The System needs to keep details of Doctors, patients and Appointments.
- Information about each Doctor and Patient is recorded in the system. These are ID,
 Name, Username, and Password.

 When will be user should be come on websites then he see all the schedule of doctor and hospital details?

5.1.2 E-R Diagram

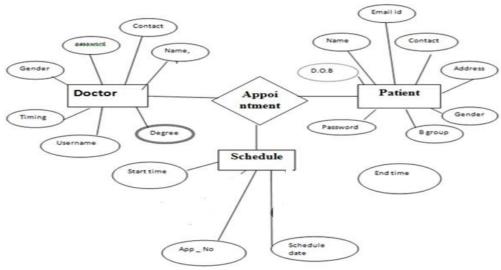


Figure 5.2 Entity Relationship Dia

It's our entity relationship diagram of our appointment system in the database there are three tables of database patient, doctor, schedule, In this table have a specific attributes there are gender, timing, contact, degree, username all are the attributes of the doctor field .D.O.B, contact, blood group, gender, address, name are the attributes of the patient table.

5.1.3 Work of Module

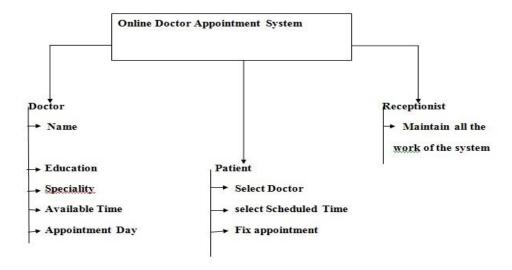


Figure 5.3 work of modules

Here is the work of modules these are three modules in the system receptionist, Patient, Doctor

Receptionist means admin its handle the overall system managing all the work of the system. Patient is firstly fill all personal information and select doctor select time then fix appointment. Doctor have his own personal profile for manage only his appointment.

5.1.4 Users of System

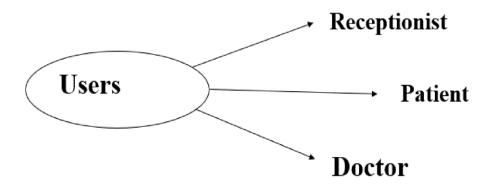


Figure 5.4 Users of system

Here is the three users in the system Patient, Receptionist, doctor are system divided into these three users.

Chapter 6

Results and Applications

Home page details of our system

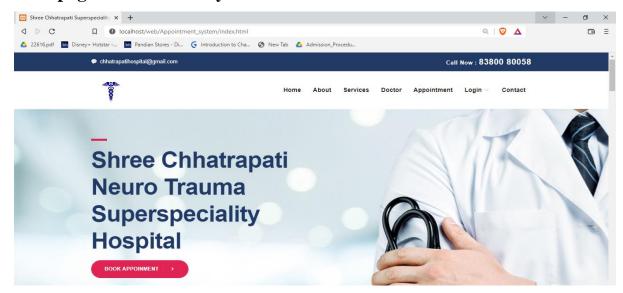


Figure 6.1 Home page

Our system is online appointment system for Shri chhatrapati Superspeciality hospital. This is by default the 1stpage; it is a home page of our system. Moving on, this hospital Appointment system project in PHP focuses mainly on dealing with the patient, doctor, and hospital records. Also, the system displays all the available hospital departments and their respective doctors.

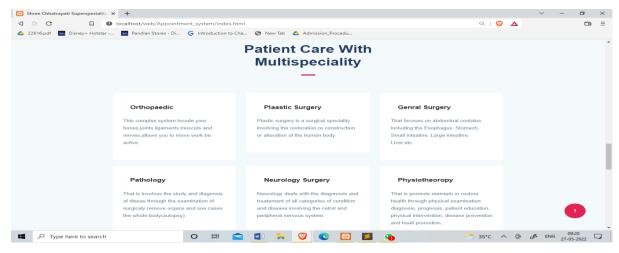


Figure 16.2 specialty page

These are all department in Shri Chhatrapati hospital.

Orthopedic, plastic Surgery, General surgery, Pathology, Neurology surgery, physiotherapy, pathology Neurology surgery, Physiotherapy

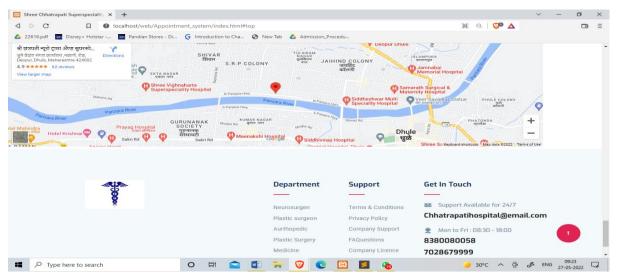


Figure 6.3 Location of hospital

We are also added hospital locations in our system for newly patient.

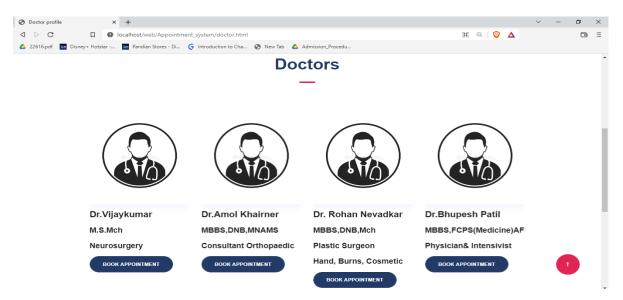


Figure 6.4 Doctor Details page

This is a Doctor Page, here user can see the details of hospitals doctor then book an appointment. After clicking the book an appointment button patient can direct move on the

appointment form. Each doctor will have their own personal account for the doctor will see his appointment only on his profile.

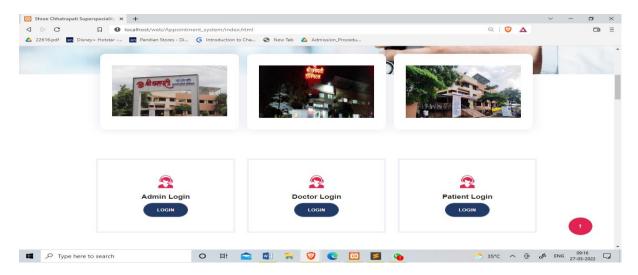


Figure 6.4 login page

User are also login from the home page .There are logins for Admin Doctor Patient In addition, the system allows creating a patient's personal account too. This project is divided into three categories. They are Admin Panel, Patient Panel, and Doctor Panel.

Here is the admin login details and work of the admin

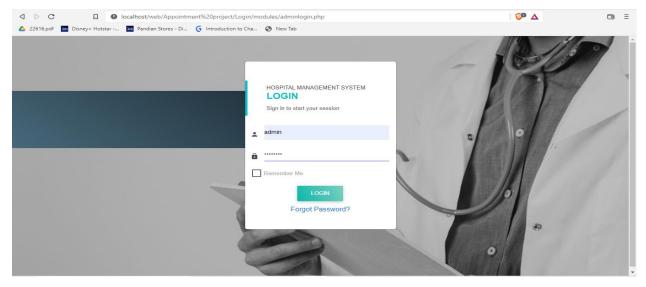


Figure 6.5 Admin login

It's a login for the admin.On the other hand, the admin has full control over the system. He/she can view all the existing records of the hospital. An admin can manage patients, doctors,

their departments, treatment types, and medical records. An admin has the right to register a doctor's account. For this, the admin has to set the doctor's account under various hospital departments too. The admin can view all the appointment records too.

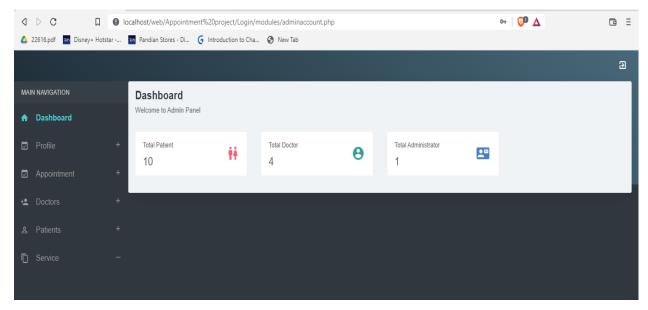


Figure 6.6 Admin profile

It's an admin panel after the login too admin panel here admin can view there account an admin can manage patients, doctors, their departments, treatment types, and medical records. An admin has the right to register a doctor's account.

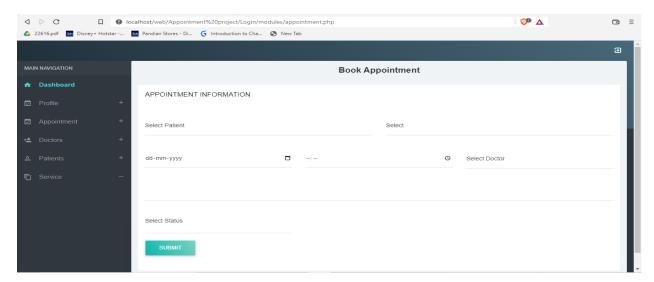


Figure 6.7 Appointment page

Admin can also book appointment for which patients are get appointment, manually. If any patient come in hospital without getting appointment online for this patient admin can make his/her appointment from here using this form. Admin book those patient appointment who's wants to be change the timing or date.

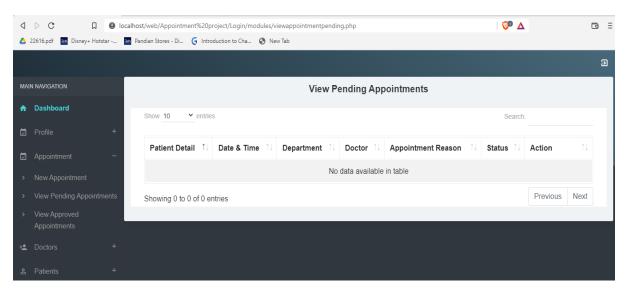


Figure 6.8 Pending appointment page

Admin also view pending appointment and then approved this appointment, after making an appointment for the very first time, the user can log in to the system and check their appointment status. By default, each appointment is set to pending status.

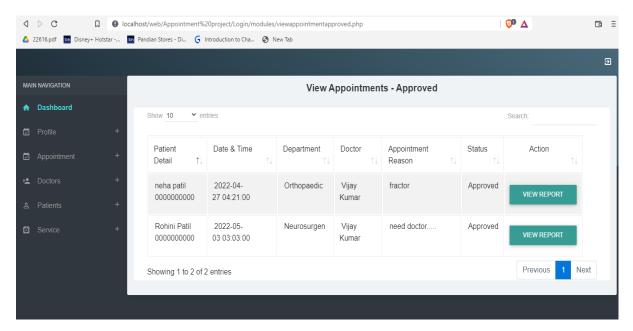


Figure 6.9 View approved appointment page

Admin view Approved appointments, each appointment has options that allow the doctor to approve or reject them. After approving the appointment, the doctor can view the patient's profile and appointment record.

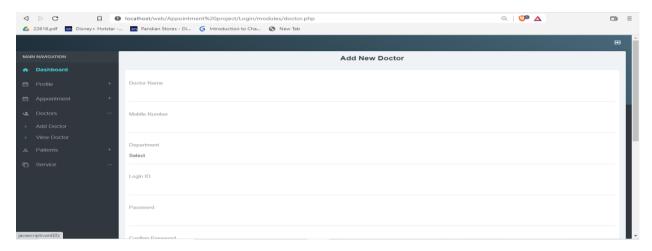


Figure 6.10 Add doctor page

Admin can also add new doctor using this add new doctor form. Admin can manage the profile of doctor and they can add. If in future any new doctor join the hospital, so the admin of the hospital can add the new doctor and they can make a new account for the doctor and we can add their respective department.

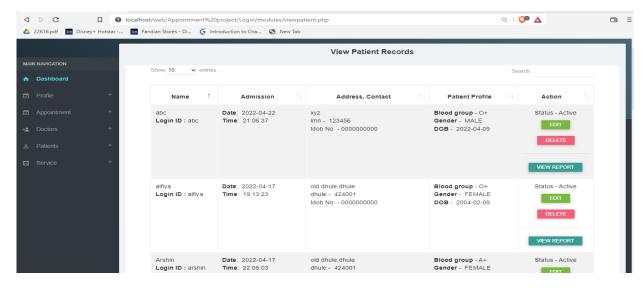


Figure 6.11 View patient record page

Here the admin can adding the record of patient after that the patient record added in this page admin can edit the patients record and they can view the report of patient, In terms of patients record, the doctor can view all the available patients with their respective information. When comes to income report.

It's an appointment page

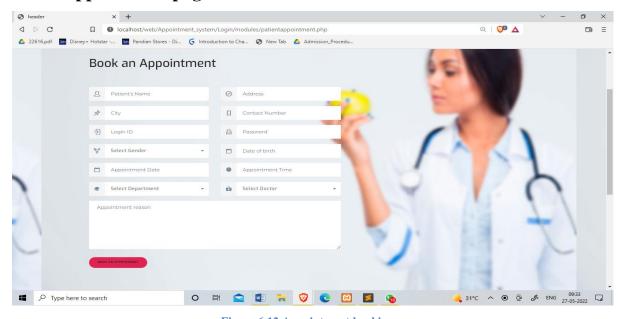


Figure 6.12 Appointment booking page

In an overview of this web application, the user can simply make an appointment. Meaning, each user will have to fill up an appointment form from the client side. The form consists of fields such as patient name, address, number, and selection of department and doctor. During this procedure, the system creates personal accounts for each patient too.

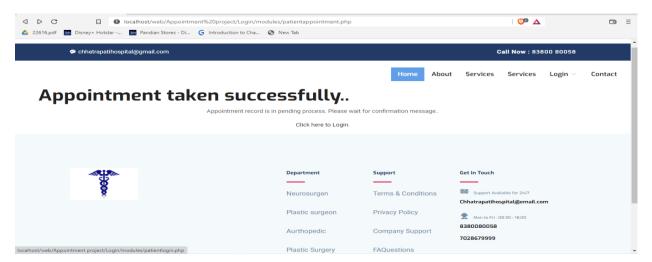


Figure 6.13 conformation page

Conformation is display to the user after booking appointment. After making an appointment for the very first time, the user can log in to the system and check their appointment status.

Here is the login page and details in work of the patient

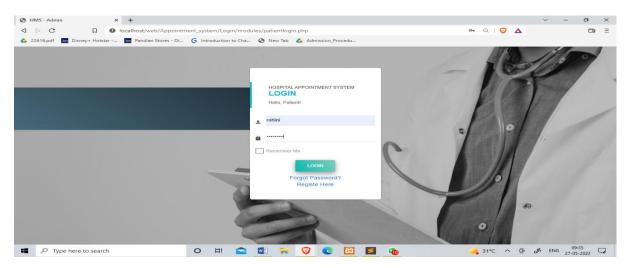


Figure 6.14 Patient login page

Here the user login page for viewing their profile patient have to login on to their account, after login to The patient can request for an appointment on his /her preferred day or time The selected day or time slot will be reserve and the patient will successfully book their appointment

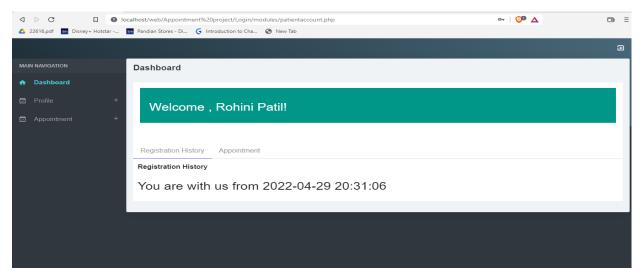


Figure 6.15 Patient profile dashboard

It's a profile of the user. After login profile will be display to the user. After making an appointment for the very first time, the user can log in to the system and check their appointment status. By default, each appointment is set to pending status. Which later, the doctor should approve or reject it in order to start their treatment process. Also, the patient can remove their appointments anytime. From a patient's panel, he/she can update their profile

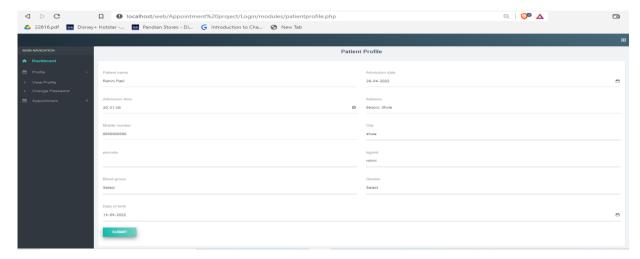


Figure 6.16 Patient profile

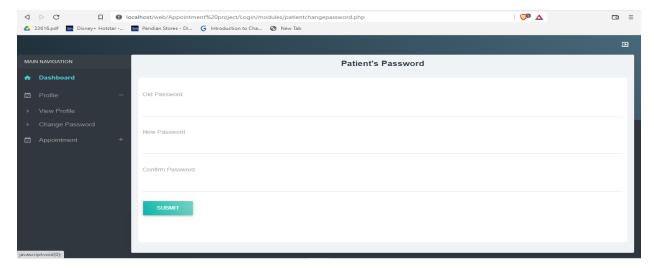


Figure 6.17 View patient password page

Also, the patient can remove their appointments anytime. From a patient's panel, he/she can update their profile Patient can also change the password of his profile.

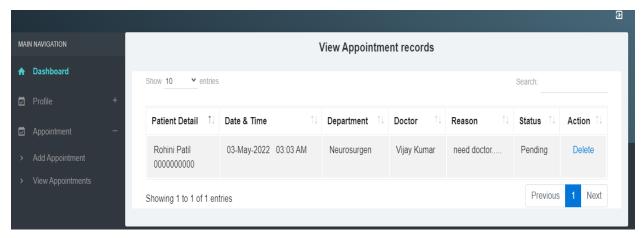


Figure 6.18 View appointment records

Patient can view appointment records. The patient can remove their appointments anytime. From a patient's panel, he/she can update their profile.

Here is the login page and details of the works of doctor

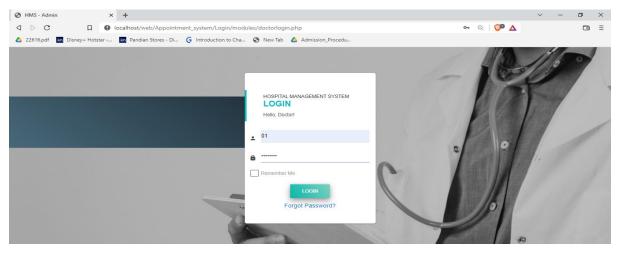


Figure 6.19 Doctor Login

Doctor Login page each doctor will have their own personal account which lets them access the system. Here, the doctor can view all the pending appointments. Each appointment has options that allow the doctor to approve or reject them. After approving the appointment, the doctor can view the patient's profile and appointment record.

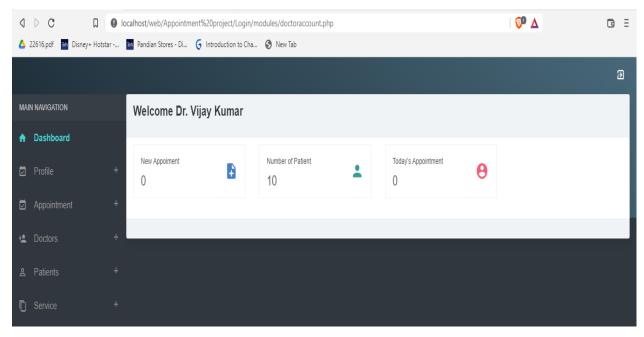


Figure 2 6.20 Doctor Profile dashboard

Its profile of the doctor .Doctor have first login and he will see his profile. And check all information about patient.

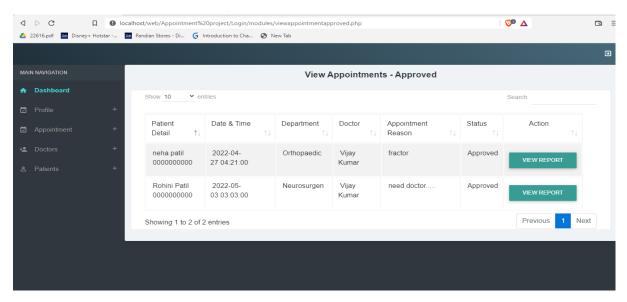


Figure 6.21 View approved appointment page

Here is pending appointments in admin login. Here, the doctor can view all the pending appointments. Each appointment has options that allow the doctor to approve or reject them. After approving the appointment, the doctor can view the patient's profile and appointment record.

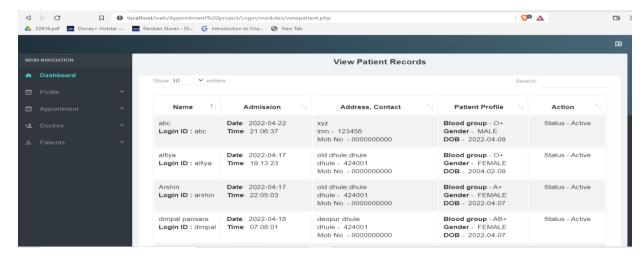


Figure 6.22 View profile records

Doctor can view patient records.

Chapter 7

Conclusion and future scope

Conclusion

Compare to the usual appointment method, the web-based appointment system could significantly increase patient's satisfaction with registration and reduce total waiting time effectively. However further improvements are needed for broad use of the system. Web-Based appointment system, registration, waiting time, patient satisfaction with getting a registration and reduce waiting times. A lack information about online appointment was the main reason for not using the system. To increase the efficiency of the registration system to reduce nonattendance rates, further studies on various interventions such as the promotion of online registration.

Future Scope:-

In system we can changes in future like we make it as a message reminder appointment system.

Increase retrieve- ability and data security.

Enhance efficiency and patient care.

We also changes in the system like medication and health care for easy tom patient have known all things through website.

References

Research Paper:-

1. Quaffas, Alaa and barker, trevor, "Online Appointment management System", 2012

Websites:-

https://www.curemantra.com/blog/why-patients-want-online-appointment-bookingsystem/

https://www.inettutor.com/source-code/doctor-appointment-system-capstone-projectproposal/